## DEPARTMENT OF THE ARMY



U.S. Army Corps of Engineers WASHINGTON, D.C. 20314-1000

REPLY TO ATTENTION OF:

CEMP-EA

2 February 1996

## MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Metric Design Policy for Military Construction

- 1. In accordance with Public Law and by Executive Order, all construction criteria and standards as of 1 January 1992, and all feasible project designs for new facilities as of 1 January 1994, must be developed using the metric system of measurement.
- 2. As a feasibility test, selected FY93, 94, and 95 military projects were designed in metric, and numerous FY96 projects were, or are being, done in metric. Based on the success of these projects and the success of other Federal agencies, on 21 November 1994, we issued the policy that all FY97 and future military projects were required to use the metric system.
- 3. Currently, in CONUS, we have 10 military metric projects totaling \$134 million under construction (including various phases of the Pentagon rehab), and 80 projects totaling \$1.5 billion actively under design, with no adverse effects or "metric premiums" reported. There are 25 Civil Works metric planning studies or reconnaissance reports underway and 28 projects totaling \$400 million under design.
- 4. Our criteria have been under conversion since 1987 when we published architectural and engineering instructions with dual units. Since then, all new and revised USACE publications, guide specifications, standard designs, etc. have been converted to, or developed, in metric. Our military guide specifications have been in metric since October 1993 and all the Department of the Army standard design packages have also been converted, or are being converted.
- 5. Our metric conversion has been closely coordinated with the construction industry. Where the industry has committed to a "hard" metric product, we must specify and use that in our designs. Where the industry is yet undecided, inch-pound products should be used with a "soft" conversion when design efficiency or architectural treatments are not compromised. True, the availability of some metric products is less than their conventional counterparts which requires more research during design, and more looking and scheduling during construction. Experience has shown that the key to a successful metric job is aggressive project management and administration.

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- 6. Metric is doable and we need to get on with it. The design and construction industry, and many of the suppliers of building materials are prepared to go metric, or have gone metric. It is time for our design and technical staffs to overcome any fears they may have and convince our customers that metric is doable and here to stay, not only because of the laws and the EO, but because it is good for the United States. We also owe our customers the assurance that, while it may seem new and strange, metric in and by itself will not increase the cost of their facilities, and it should not be used as a scapegoat to justify cost overruns or bid busts with little or no evidence as back-up.
- 7. I expect each one of you to ensure that lessons-learned from our metric experiences, both good and bad, are shared with us here in Washington so we can share them with the entire Corps. In return, my staff will continue to work the Construction Metrication Council and share the experiences of other Federal agencies with you.

FOR THE COMMANDER:

Major General, USA

**Director of Military Programs** 

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